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Rhodora

DECEMBER

feet altitude, were found Clematis verticillaris, DC., Arabis hirsuta, Scop., *Arabis lyrata, L., *Rosa acicularis, Lindl., Lonicera dioica,L., Galium lanceolatum, Torr., *Rhododendron canescens, G. Don, Hydrophyllum virginicum, L., Habenaria Hookeriana, Torr., Carex scirpoidea, Michx., and Asplenium Ruta-muraria, L. Higher up on the mountain was Allium tricoccum, Ait. In the lower lands we found *Sanicula trifoliata, Bicknell, Aspidium Goldianum, Hook., and in very wet ground, beside a brook, Myosotis palustris, With., and Gratiola virginiana, L., while in a marsh was Scheuchzeria palustris, L. The grass of Parnassus, Parnassia caroliniana, Michx., grew everywhere in the lower damp regions in great abundance.

GRAY HERBARIUM.

HONEY-GUIDES OF NIGHT BLOOMERS.

E. WILLIAMS HERVEY.

A RECENT writer comparing the colors of a diurnal bloomer having honey-guides, with a white-flowered nocturnal bloomer having no honey-guides, remarks that the latter "has no lines to indicate the whereabouts of its nectar, for these would be undistinguishable in the dark and therefore useless," implying that nocturnal flowers never have honey-guides. In my recently published Observations on the Colors of Flowers, I took exception to this statement and cited *Convolvulus sepium* as an example of a flower blooming in the morning twilight. To this example should be added *Datura Tatula*, and *Ipomwa purpurea*, the Morning Glory. The former is of a lavender color outside, and with only a slight tinge of blue within, appearing nearly white. Midway between the top and bottom of the tube, there are fifteen deep-purple, longitudinal lines of about an inch in length, viz., three to each of the five ribs. The flower in August expands between five and six o'clock P.M. and closes early the next morning.

Ipomaa purpurea has white, pink, purple and blue varieties; each variety has five stripes or rays running from the border of the limb to the commencement of the tube; the rays are always of a color, or at least of a shade, different from the flower, a white flower usually having pink, and a blue one red-purple rays, etc. A white variety is occasionally seen without any colored markings.

All these different varieties of the flower opened at the same time,

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viz., at about half past three o'clock A.M. in the month of August, or fully an hour before sunrise, and while it was so dark that the aid of a lantern was necessary to distinguish the violet and purple blossoms. On bright days these flowers begin to droop at 9 A.M. and are permanently closed by noon.

There are other colored night bloomers besides the lavender-purple *Datura*. For example, *Lychnis dioica*, a pink flower, expands its petals between 6 P.M. and midnight.

NEW BEDFORD.

FURTHER ADDITIONS TO THE FLORA OF MIDDLESEX COUNTY, MASS.

Alfred W. Hosmer.

IN collecting plants in Concord, Mass., and neighboring towns for the past ten years, I have found the following which are not given in Dame & Collins' Flora of Middlesex County, or if mentioned are · spoken of as rare. In the latter case I add a new station. *Anemone Pennsylvanica*, L. Dry open roadside in the northern

part of Concord.

Cardamine pratensis, L. Quite abundant in wet meadows in Weston.

Viola canina, var. Muhlenbergii, Gray. White-flowered form, found in Concord and Acton, persistent for many years.
Malva sylvestris, L. Dry open roadsides, Concord and Acton.
Erodium moschatum, Willd. Very abundant in an asparagus field,
Concord, where only commercial fertilizers had been used.
Polygala paucifolia, Willd. Violet-flowered form, found in Sudbury in 1893, spreading.

Lathyrus pratensis, L. Found in a cultivated field, Concord in 1891.

Spiraea tomentosa, L. White-flowered form, found in Carlisle.
 Rubus Canadensis, L. Double-flowered form, beside a railway
 track, Concord, 1893, spreading.
 Rosa canina, L. Persistent in Concord at three stations for some
 twenty-five years.

Echinacea purpurea, Moench. Persistent at Acton for seven years. Cnicus horridulus, Pursh. Concord at two stations and spreading.